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10/779,822	02/18/2004	Frank Ryll	449122068100	6804
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BELL, BOYD & LLOYD, LLP			EXAMINER	
P.O. BOX 1135			JAKOVAC, RYAN J	
CHICAGO, IL 60690				
			ART UNIT	PAPER NUMBER
			4121	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/779,822

Applicant(s)

RYLL, FRANK

Examiner

Ryan J. Jakovac

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

This action is responsive to communications filed on 02/18/2004.

Claims 1-19 are pending.

Claims 1-19 are rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-17 are rejected under 35 U.S.C. 102(e) as being anticipated by US 20040248583 to Satt et al (hereinafter Satt).

In regards to claim 1, Satt teaches a method for optimizing traffic load in a communication network comprising a plurality of network elements which are functionally, essentially independent (Abstract, A resource allocation system for a network including a traffic shaper operative, a policy processor, and network device), wherein presence and availability of a user of a service are taken as a basis for granting a release for a data transmission (Paragraph [0048], Resources are allocated based on the number of users using a service).

In regards to claim 2, Satt teaches the method as claimed in claim 1, wherein the presence and availability of the user of the service are checked using a presence server (Paragraph [0066], The policy processor receives information about a users profile and location).

In regards to claim 3, Satt teaches the method as claimed in claim 1, wherein the presence and availability of the user of the service are checked using control data in a telecommunication network (Paragraph [0048], Service is determined unavailable due to limited bandwidth).

In regards to claim 4, Satt teaches the method as claimed in claim 1, wherein the presence and availability of the user of the service are checked using at least one service use profile including profile data (Paragraph [0050-0058], The system allocates resources to users based on user location and past usage profile (i.e. service use profile including profile data)).

In regards to claim 6, Satt teaches the method as claimed in claim 1, wherein at least one network element has the traffic load detected for it (Abstract, Network devices are associated with flows from network streams),

timer signals, external trigger signals or a result of a comparison with preprogrammed threshold values is are taken as a basis for creating load messages for

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signaling the traffic load and sending them to a network operation control unit, the load messages are received and evaluated by the network operation control unit (Paragraph [0066], The policy processor receives load messages and determines the resource rules for bandwidth based on policy (i.e. preprogrammed threshold values)), and control signals to selected content databases or platforms relating to the transmission of predetermined contents or other information to users' telecommunication and data terminals connected to selected network elements are generated in relation to the evaluated load messages (Paragraph [0066], The policy processor sends control signals to the traffic shaper based on user profile).

In regards to claim 7, Satt teaches the method as claimed in claim 6, wherein the network operation control unit transmits trigger signals to the network elements for generating and/or transmitting load messages (Paragraph [0071], The policy processor interfaces with the capacity and mobility analyzer which monitors the Gb interface in order to determine the load over the air interface. Using mobility management and flow control messages, the policy processor interfacing with the capacity and mobility analyzer tracks the free air resources.).

In regards to claim 8, Satt teaches the method as claimed in claim 6, wherein the network elements have the threshold values relating to the traffic load programmed for them which are used for a comparison which triggers the transmission of load

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messages (Paragraph [0066], The policy processor connected to network elements determines the resource allocation rules for bandwidth according to carrier policy).

In regards to claim 9, Satt teaches the method as claimed in claim 6, wherein control signals are output to selected content databases or platforms in relation to at least one service use profile for the users which includes prestored profile data (Paragraph [0066], The policy processor sends control signals to the traffic shaper based on user profile).

In regards to claim 11, Satt teaches the apparatus as claimed in claim 10, wherein the second unit is configured as an evaluation and decision unit (Paragraph [0066], The traffic shaper allocates bandwidth and delay.).

In regards to claim 12, Satt teaches the apparatus as claimed in claim 10, wherein the first unit receives data for checking other network units (Paragraph [0066], The policy processor retrieves information regarding mobile user profile and location).

In regards to claim 13, Satt teaches the apparatus as claimed in claim 10, wherein the first unit is configured as a presence server (Paragraph [0065-0074], Allocation of resources based on users information and bandwidth policy).

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In regards to claim 14, Satt teaches the apparatus as claimed in claim 10, further comprising:

a network operation control unit including, for receiving load messages from at least some of the network elements (Paragraph [0066], The policy processor receives load information); and

a load data reception unit which is connected to an evaluation and decision unit for evaluating the load messages and for outputting control signals in relation to message content to selected content databases or platforms (Paragraph [0079], Fig. 4, Control signaling between traffic shapers and policy processors).

In regards to claim 15, Satt teaches the apparatus as claimed in claim 10, wherein content databases and/or platforms are designed to respond to control signals for transmitting predetermined contents or other information to users' telecommunication or data terminals connected to selected network elements (Paragraph [0080], The traffic shaper responds to signals from the policy processor that shape downlink flow to the mobile station).

In regards to claim 16, Satt teaches the apparatus as claimed in claim 14, further comprising traffic load monitoring units or load message transmission units associated with the network elements including timers for actuating detection of the traffic load and/or transmission of the load message (Paragraph [0066], The policy processor interfaces with the mobile system infrastructure and receives information including

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information regarding the load on the interface (i.e. load message)) to the network operation control unit at predetermined times or at predetermined time intervals (Paragraph [0081], The policy processor scales up as the complexity of the policy processor depends on the number of messages per unit of time).

In regards to claim 17, Satt teaches the apparatus as claimed in claim 14, wherein at least some of the network elements are provided with traffic load monitoring units and load message transmission units, connected to the latter, for transmitting load messages which signal the respective network element's traffic load to the network operation control unit (Paragraph [0108], The policy processor is connected to remote policy processors where the remote COPS message collector collects messages from remote policy processor that contain flow control data related to local mobile users).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 20040248583 to Satt as applied to claims 16-17 above, and further in view of US 20030158940 to Leigh.

In regards to claim 18, Satt teaches the apparatus as claimed in claim 17, wherein the traffic load monitoring units have discriminator units (Paragraph [0108], The policy processor is connected to remote policy processors where the remote COPS message collector 914 collects messages from remote policy processor that contain flow control data related to local mobile users) which are configured such

Satt does not teach but Leigh teaches that they continuously compare a detected traffic load with threshold values and actuate transmission of the load message if the threshold values are exceeded and/or undershot (Paragraph [0030], Timer value is set at a time when the load reaches a predefined threshold. When the time counts down (i.e. trigger pulse) the primary master ILB is notified of the load condition.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine that they continuously compare a detected traffic load with threshold values and actuate transmission of the load message if the threshold values are exceeded and/or undershot as taught by Leigh with the apparatus of Satt to facilitate a zone-based load balancing method (Leigh, paragraph [0029-0031]).

In regards to claim 19, Satt teaches the apparatus as claimed in claim 16, wherein for requesting load messages from the traffic load monitoring units, an

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evaluation and decision unit in the network operation control unit (Paragraph [0108], The policy processor is connected to remote policy processors where the remote COPS message collector collects messages from remote policy processor that contain flow control data related to local mobile users. Paragraph [0066], The policy processor retrieves information about the load on the air interface.) includes

Satt does not teach but Leigh teaches a timer and a trigger pulse transmitter for generating and transmitting trigger pulses (Paragraph [0030], Timer value is set at a time when the load reaches a predefined threshold. When the time counts down (i.e. trigger pulse) the primary master ILB is notified of the load condition.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine a timer and a trigger pulse transmitter for generating and transmitting trigger pulses as taught by Leigh with the apparatus of Satt to facilitate a zone-based load balancing method (Leigh, paragraph [0029-0031]).

3. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 20040248583 to Satt as applied to claim 1 above, and further in view of US 20030167329 to Kurakake et al (hereinafter Kurakake).

In regards to claim 5, Satt teaches the method as claimed in claim 1, Satt does not teach but Kurakake teaches wherein a positive check result is taken as a basis for an evaluation and decision unit to release a data transmission to the user of the service

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(Paragraph [0044-0045], The resource reservation device 322 compiles reservation results sent in by the resource management devices for each reserved resource and compares or checks the results against user resource requests. A notification is sent regarding the users usage of the resource for monitoring purposes and to bill the user.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine wherein a positive check result is taken as a basis for an evaluation and decision unit to release a data transmission to the user of the service as taught by Kurakake with the method of Satt to provide a useful result of recording or tracking the end of usage of a resource for purposes of performance monitoring and for billing the user (Kurakake, paragraph [0045].).

In regards to claim 10, Satt teaches an apparatus for optimizing traffic load in a communication network, comprising (Fig. 3, Resource allocation system):

a plurality of network elements which are functionally, essentially independent (Fig. 3, numbers 300,308,310);

and a first unit which is configured such that it checks whether a user of a service is present and available and forwards the check result to a second unit (Paragraph [0066], The policy processor retrieves information regarding user profile and user location, based on this the policy processor sends control signals to the traffic shaper), Satt does not teach but Kurakake teaches the second unit configured such that it evaluates the check result and, if the check result is positive, makes a decision to release a data transmission to a present and available user of the service (Paragraph

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[0044-0045], The resource reservation device 322 compiles reservation results sent in by the resource management devices for each reserved resource and compares or checks the results against user resource requests. A notification is sent regarding the users usage of the resource for monitoring purposes and to bill the user.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the second unit configured such that it evaluates the check result and, if the check result is positive, makes a decision to release a data transmission to a present and available user of the service as taught by Kurakake with the apparatus of Satt to provide a useful result of recording or tracking the end of usage of a resource for purposes of performance monitoring and for billing the user (Kurakake, paragraph [0045].).

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J. Jakovac whose telephone number is (571) 270-5003. The examiner can normally be reached on Monday through Friday, 7:30 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi T. Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RJ



George Newauter
Primary Examiner